

Write your name here

Surname

Other names

Pearson BTEC Level 3
Nationals Certificate,
Extended Certificate,
Foundation Diploma,
Diploma, Extended
Diploma, Diploma

Centre Number

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Learner Registration Number

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Animal Management and Animal Management with Science

Unit 2: Animal Biology

Monday 4 June 2018 – Morning

Time: 1 hours 30 minutes

Paper Reference

31645H

You do not need any other materials.

Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and learner registration number.
- Answer **all** questions.
- Answer the questions in the spaces provided
– *there may be more space than you need.*

Information

- The total mark for this paper is 80.
- The marks for **each** question are shown in brackets
– *use this as a guide as to how much time to spend on each question.*

Advice

- Read each question carefully before you start to answer it.
- Try to answer every question.
- Check your answers if you have time at the end.

Turn over ►

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Pearson

Answer ALL questions. Write your answers in the spaces provided.

1 (a) State **four** functions of the skeletal system.

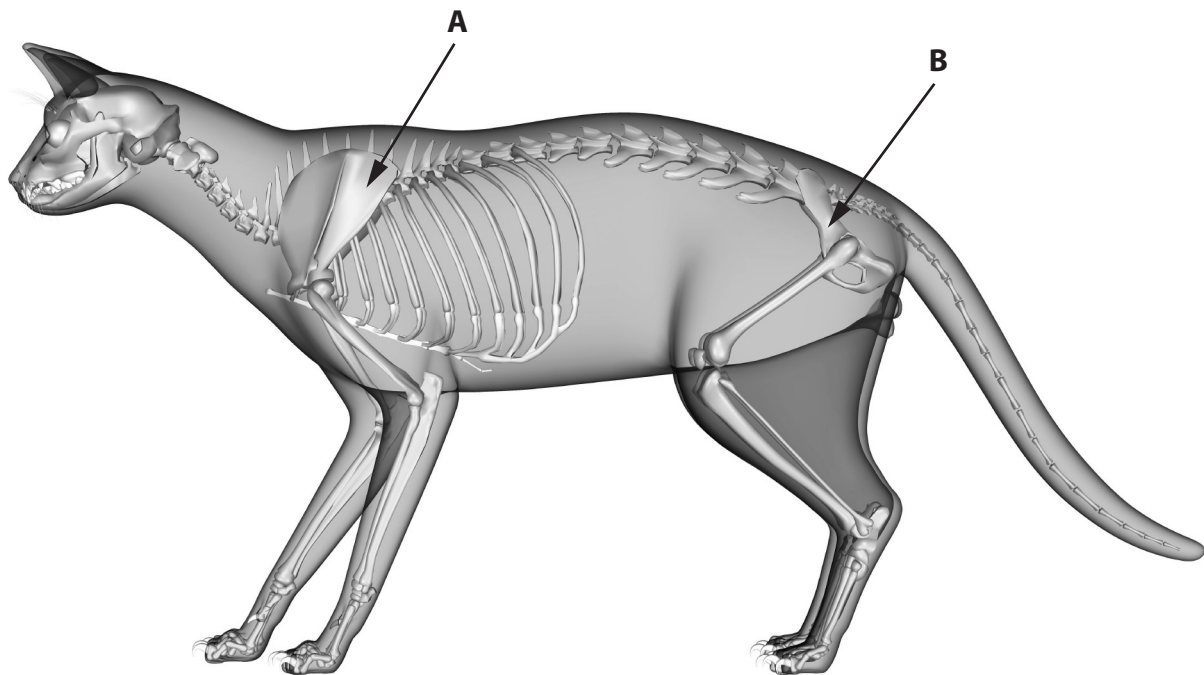
(4)

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3

4



(Source: © Friedrich Saurer/Science Photo Library)

(b) Give the name of bones **A** and **B** on the cat skeleton.

(2)

A

B

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(c) Give **three** functions of the integumentary system.

(3)

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(Total for Question 1 = 9 marks)

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2 (a) Complete the table by giving the functions of each part of the eye.

(4)

PART	FUNCTION
Iris	
Lens	
Retina	
Cornea	

(b) Describe the role of the tapetum lucidum.

(2)

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(c) Explain how the structure of the tapetum lucidum helps its function.

(3)

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(Total for Question 2 = 9 marks)

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QUESTION 3 BEGINS ON THE NEXT PAGE.



Levels of hormones change during the oestrous cycle.

3 (a) State the change in the level of each of the following hormones immediately after ovulation.

(4)

(i) LH

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(ii) FSH

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(iii) Oestrogen

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(iv) Progesterone

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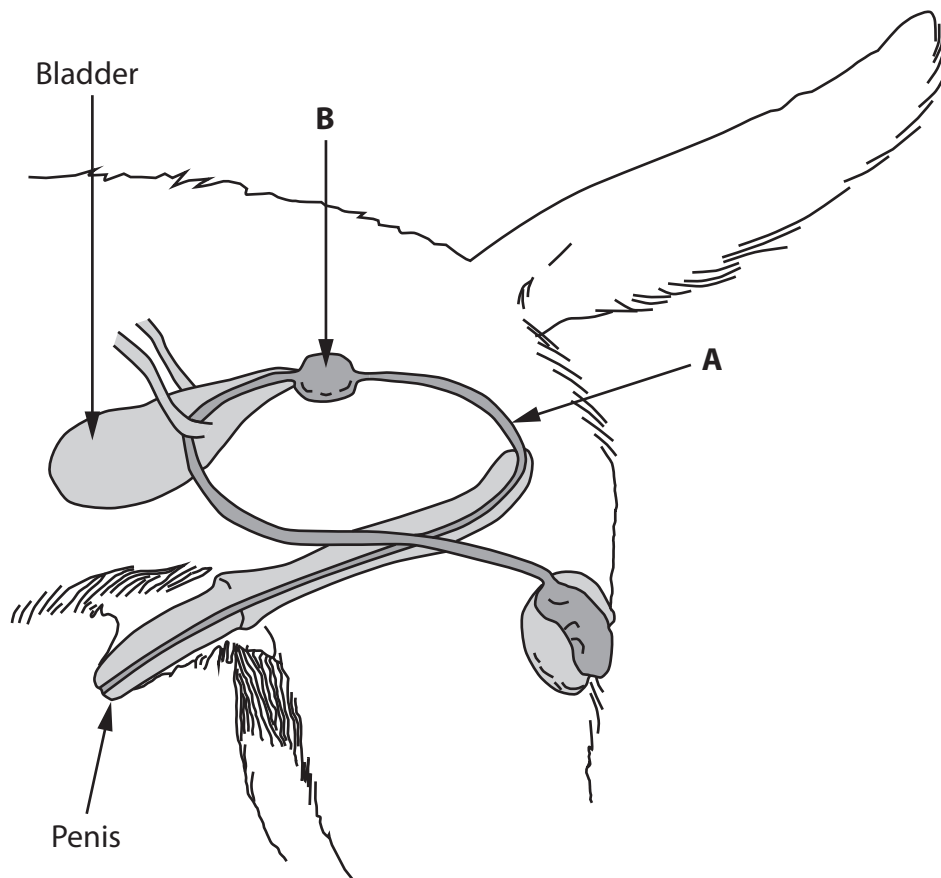
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(b) Identify structures **A** and **B** of the male reproductive tract of a dog.

(2)

A

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B

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(c) State the incubation period of a chicken egg.

(1)

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(Total for Question 3 = 7 marks)



P 5 3 9 5 5 R A 0 7 2 0

4 (a) Identify **two** types of skeletal joint.

(2)

1

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2

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When a nervous impulse arrives at the neuromuscular junction (where nerve meets muscle), acetylcholine is released.

(b) Describe how the release of acetylcholine results in muscle contractions.

(4)

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(c) Explain the role of ATP (adenosine triphosphate) in muscle contraction.

(4)

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(Total for Question 4 = 10 marks)

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5 (a) Discuss the structure and functions of blood.

(8)

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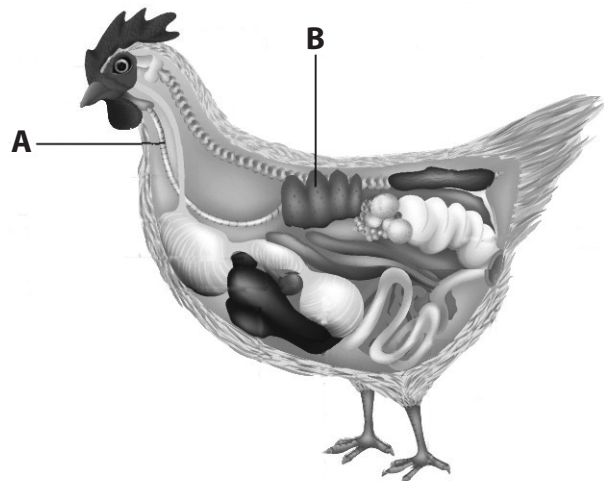
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Chicken anatomy



(b) Identify structures **A** and **B** in the respiratory system of a chicken.

(2)

A

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B

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(Total for Question 5 = 10 marks)



6 (a) Describe the process of osmosis.

(4)

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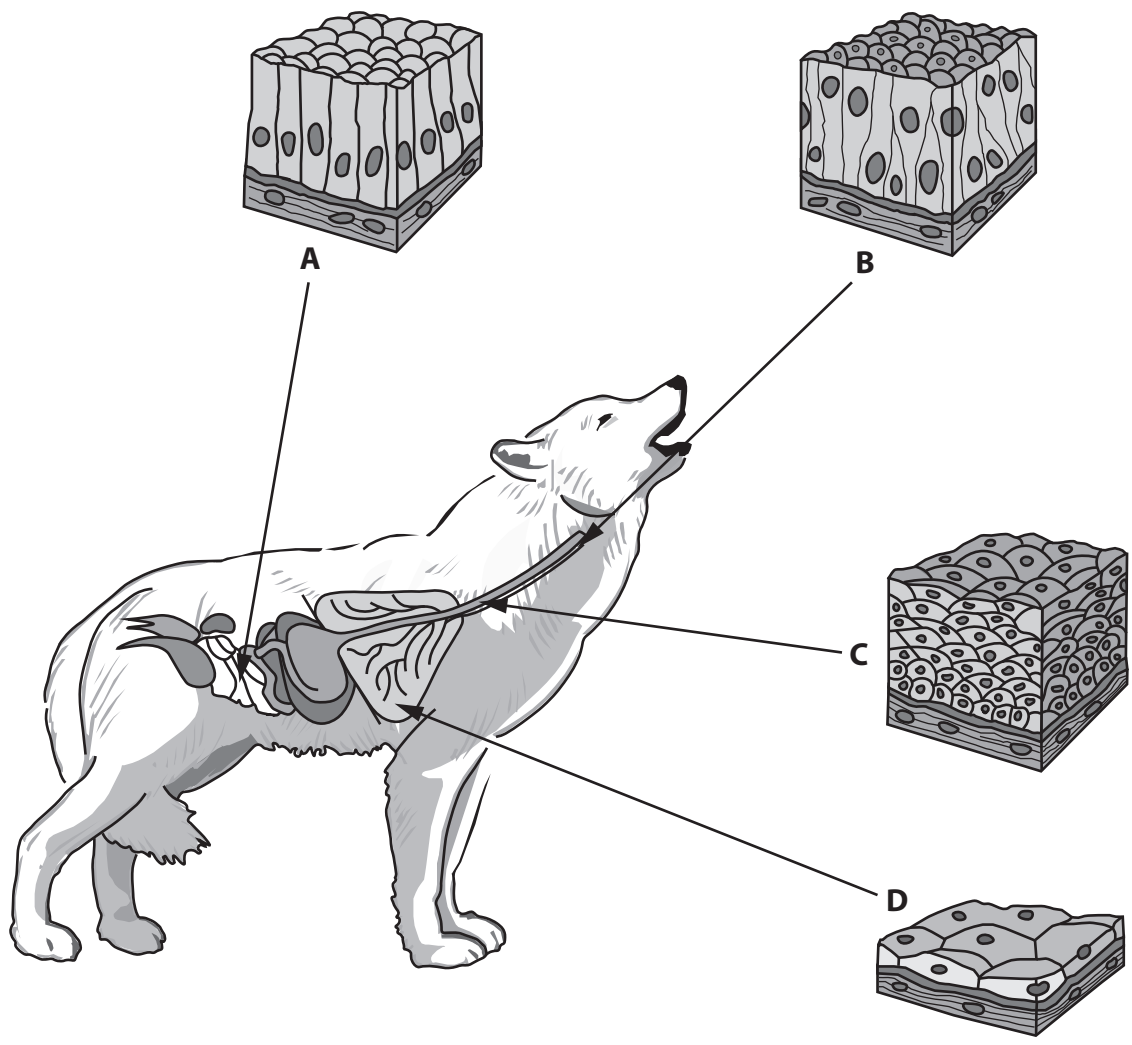
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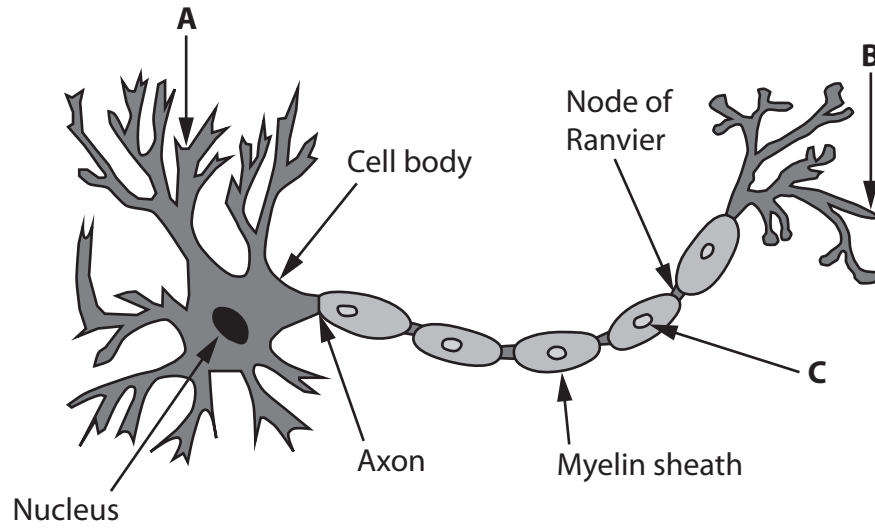
(b) Identify each of the epithelial tissues labelled **A** to **D** on the image of the dog above.

(4)

- A
- B
- C
- D



The image shows a neurone.



(c) Identify the structures labelled **A** to **C**.

(3)

A

B

C

(d) Define 'diffusion'.

(2)

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(e) Explain active transport in animal cells.

(4)

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(Total for Question 6 = 17 marks)

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7 (a) Complete the table by writing in the **two** missing vertebrate classes.

(2)

Mammalia
Aves
Amphibia

(b) State **four** features of amphibians.

(4)

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- 2
- 3
- 4

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(c) Explain **two** behavioural adaptations found in amphibia.

(4)

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(Total for Question 7 = 10 marks)

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8 Discuss the role of the nephron.

Handwriting practice area consisting of 20 horizontal dotted lines for writing the answer to Question 8.

(Total for Question 8 = 8 marks)

TOTAL FOR PAPER = 80 MARKS

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